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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,475	11/06/2003	Howard A. Mizes	11416	8594

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EXAMINER

HUFFMAN, JULIAN D

ART UNIT

PAPER NUMBER

2853

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/701,475	Applicant(s) MIZES ET AL.	
	Examiner Julian D. Huffman	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 41 is/are rejected.
- 7) ☒ Claim(s) 1-40 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/6/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In section 0005, it is suggested that application number 09/738,573 be changed to U.S. Patent 6,760,056.

Appropriate correction is required.

Claim Objections

2. Claims 1-40 are objected to because of the following informalities:

In claim 1, line 21, "alignment marks" should be changed to "fiducial marks". A similar correction is required for claim 21.

In claims 15 and 35, second line of last paragraph, the word "with" should be inserted after "associated".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 41 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 41 is directed towards printed matter. A mere arrangement of printed matter, though seemingly a "manufacture," is rejected as not being within the statutory classes. See *In re Miller*, 418 F.2d 1392, 164 USPQ 46 (CCPA 1969); *Ex parte Gwinn*, 112 USPQ 439 (Bd. App. 1955); and *In re Jones*, 373 F.2d 1007, 153 USPQ 77 (CCPA 1967). See MPEP 706.03(a) [R-2] I A.

The claim does not "define either new features of structure or new relations of printed matter to structure, or both" and "substance or language of that which is printed may not constitute patentable subject matter". "Where the sole distinction set out in the claims over the prior art is in the printed matter, there being no new feature of physical structure and no new relation of printed matter to physical structure, such claims may not be allowed, it is only where the claims define either new features of structure or new relations of printed matter to structure, or both, which new features or new relations give rise to some new and useful function or effect or result that claims may be properly allowed. *Ex Parte Gwinn*.

"The mere arrangement of printed matter on a sheet or sheets of paper does not constitute patentable subject matter". *In re Russel*, 18 C.C.P.A. (Patents) 1184, 48, F.2d 668,9 USPQ 181, and *In re Reeves*, 20 C.C.P.A. (Patents) 767,62 F.2d 199, 16 USPQ 110.

Reference is also made to *In re Hansen* (CCPA) 69 USPQ 332 as an example of subject matter found to be patentable as involving physical structure with printed matter. "Matter did not of itself render the structures patentable; it was merely an incidental part of the structures taken as a whole".

Accordingly claims 1-40 are *statutory*, since they relate the printed matter to a useful process or program for carrying out the process.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 41 is rejected under 35 U.S.C. 102(e) as being anticipated by Mizes et al. (U.S. 6,819,352 B2).

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Mizes et al. discloses a compensation pattern (fig. 2) usable to determine a difference in gray level between an actual gray level value and an intended gray level

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value at a cross-process-direction image-forming device pixel location in the image (column 6, lines 30-38), comprising:

a plurality of gray level portions (21), each gray level portion having a gray level that is different from the other gray level portions (column 6, lines 30-38) and extending along the cross-process-direction, the plurality of gray level portions arranged along the process direction, and spaced from each other along the process direction such that a gap is provided between each pair of adjacent gray level portions; and

a number of rows of fiducial marks (20), the rows of fiducial marks distributed among the plurality of gray level portions and comprising at least some of:

a first row of fiducial marks located before the plurality of gray level portions along the process direction,

a second row of fiducial marks located after the plurality of gray level portions along the process direction (20), and

at least one third row of fiducial marks, each third row of alignment marks located in a gap between a pair of adjacent gray level portions.

Allowable Subject Matter

7. Claims 1-40 would be allowed if rewritten to overcome the objection outlined in paragraph 2 above.

The primary reason for the indication of allowable subject matter in claims 1-20 is the inclusion of a method for compensating for streak defects in an image formed using an image forming device, including the steps of:

printing a number of rows of fiducial marks, the rows of fiducial marks distributed among a plurality of gray level portions and comprising at least some of:

a first row of fiducial marks located before the plurality of gray level portions;

a second row of fiducial marks located after the plurality of gray level portions; and

at least one third row of fiducial marks, each third row of alignment marks located in a gap between a pair of adjacent gray level portions;

scanning the compensation pattern to generate a set of scanned image data, the scanned image data defining an image value for each of a plurality of scanned image cross-process-direction pixel locations for at least one of the gray level portions and for at least one row of fiducial marks;

analyzing the scanned image data for at least one of the gray level portions to determine at least one actual gray level value for at least one of the plurality of gray level portions for at least one cross-process-direction-image-forming device pixel location based on a location of at least one fiducial mark of the at least one row of fiducial marks in the scanned image data.

It is these steps found in the claims, as claimed in the combination of, which have not been found, taught, or suggested by the prior art of record.

The primary reason for the indication of allowable subject matter in claims 21-40 is the inclusion of a storage medium storing a set of program instructions for compensating for streak defects in an image formed using an image forming device, including:

instructions for printing a plurality of gray level portions, each gray level portion having a gray level that is different from the other gray level portions and extending along the cross-process-direction, the plurality of gray level portions arranged along the process direction, and spaced from each other along the process direction such that a gap is provided between each pair of adjacent gray level portions,

instructions for printing, for each gray level portion, a first edge locating mark located adjacent to a first end of that gray level portion and a second edge locating mark located adjacent to a second end of that gray level portion;

instructions for printing a first row of fiducial marks before the plurality of gray level portions along the process direction,

instructions for printing a second row of fiducial marks after the plurality of gray level portions along the process direction, and

instructions for printing a plurality of third rows of fiducial marks, one third row of alignment marks located in each gap between a pair of adjacent gray level portions;

instructions for scanning the compensation pattern to generate a set of scanned image data, the scanned image data defining an image value for each of a plurality of scanned image pixel locations; and

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instructions for analyzing the scanned image data for at least one of the gray level portions to determine at least one actual gray level value for at least one of the plurality of gray level portions for at least one cross-process-direction image-forming device pixel location based on a location of at least one fiducial mark of at least one row of the first row, the second row and the plurality of the third row of fiducial marks in the scanned image data.

It is these instructions found in the claims, as claimed in the combination of, which have not been found, taught, or suggested by the prior art of record.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 10:00a.m.-6:30p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Julian D. Huffman
23 November 2005